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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,739	01/26/2004	Michael P. Connelly	1842.011US1	8635
70648	7590	11/28/2007		
SCHWEGMAN, LUNDBERG & WOESSNER/WMS GAMING			EXAMINER	
P.O. BOX 2938			BOND, CHRISTOPHER H	
MINNEAPOLIS, MN 55402				
			ART UNIT	PAPER NUMBER
			3714	
			MAIL DATE	DELIVERY MODE
			11/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/764,739

Applicant(s)

CONNELLY, MICHAEL P.

Examiner

Christopher H. Bond

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 and 06 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/6/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments and amendments were received on August 6, 2007.

Claims 1-37 are still pending in the present application.

Information Disclosure Statement

2. The Information Disclosure Statement filed August 6, 2007 has been acknowledged.

Drawings

3. The corrections to the drawings have been noted by the Examiner. The Examiner withdraws the previous objection.

Claim Rejections - 35 USC § 112

4. The amendments to claims 16 and 34 have been noted. The Examiner's previous 35 U.S.C. §112, first and second paragraph rejections have been withdrawn.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1, 11-13, 17-19, 29-31, and 35-37 have been rejected under 35 U.S.C. 102(e) as being anticipated by Hoke, USPAT 6,561,908 (hereinafter Hoke).**

6. As to claims 1, 19, and 37, Hoke presents a gaming device with a metronome system for interfacing sound recordings and discloses (column 1, line 60 - line 2, line 19), "...a gaming device with a metronome system capable of interfacing different sound

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recordings on any tick of a regular, repeating interval. The term interface, as used herein, includes switching; replacing combining, supplementing, splicing, overlaying or otherwise partially or wholly joining two or more sound recordings, temporarily or permanently...[the] invention can be incorporated into a computer system of any gaming device which includes: a central processing unit (CPU); input and output devices; game read only memory (ROM); game random access memory (RAM); a sound card, including sound files and a sound processor; and a bus which enables all of these components to communicate...the metronome system includes game code, music code, and metronome code....The music code...is a set of instructions which the CPU uses to determine the type, duration and volume of tones to be played." Hoke further discloses (column 3, lines 34-44) that, "...the metronome system of the present invention can be adapted to play a plurality of sound recording simultaneously and when a sound-causing event occurs, to play a plurality of different sound recordings on beat with the earlier sound recordings or on any other tick whereupon the CPU reads the game state data. The metronome system of the present invention provides gaming devices with the capacity to interface, change or switch sound recordings when certain game events occur, while making such change on a code-driven metronome tick." Figure 4 clearly shows four different sound recordings being played simultaneously, while Figure 5B - 5C clearly shows sound recordings being played both simultaneously and selected and deselected over a period of time. This would anticipate the applicant's limitation of having a computerized gaming system comprised of a gaming module, a processor and gaming code, and an audio module (sound card, sound files, and sound processor)

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operable to play an audio track, the audio track comprising a plurality of selected audio elements tracks that are played at the same time to create the played audio track, wherein the selected audio tracks are selected by the wagering game machine independent of user selection. This also anticipates the applicant's limitation wherein the audio element tracks are selected and deselected over time.

7. Furthermore, the method of providing audio from a computerized gaming system comprising: playing an audio track comprised of a plurality of audio element tracks that are played at the same time by the computerized gaming system to create the played audio track, wherein the audio element tracks are selected by the wagering game machine independent of the user selection, wherein the audio elements are deselected over time by the selection process, the computerized game system further operable to conduct a wagering game upon which monetary value can be wagered, merely discloses the steps necessary for the gaming device's operation. Since each step must be implemented in order to make the device, the method would have been inherent in view of the device.

8. As to claims 11 and 29, Figure 5B in Hoke illustrates two audio element tracks (sound recordings) being played--that is to say A and B--each of which has a different length.

9. Furthermore, the method of playing back the audio element tracks repeatedly, as evidenced in Figure 5B--i.e. showing BAR 1, Measure 1 to signify a repeat--where at least two of the audio elements are of different length, merely discloses the steps of the

gaming device's operation. Since each element must be implemented in order to make the device, the method would have been inherent in view of the device.

10. As to claims 12 and 30, Figure 3 in Hoke illustrates an audio track that is not a combination of other audio element tracks.

11. Furthermore, the method wherein the audio track further comprises a portion that is not a combination of audio element tracks, merely discloses the steps of the gaming device's operation. Since each element must be implemented in order to make the device, the method would have been inherent in view of the device.

12. As to claims 13, 17, 18, 31, 35, and 36, Hoke discloses (column 3, lines 28-32), "Furthermore, the sound file changes can include increasing or decreasing the volume of the current musical sound recording. In addition to playing musical sound recordings, the sound file change can, instead, include playing a sound effect on any beat or bar..."

13. Furthermore, the method of performing the limitations described above merely discloses the steps needed for the gaming device's operation. Since each element must be implemented in order to make the device, the method would have been inherent in view of the device.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 16 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoke in view of Thagard et al., USPAT 6,215,737 (hereinafter Thagard).

16. While Hoke discloses a gaming machine capable of playing two different audio tracks simultaneously, Hoke fails to explicitly disclose that the audio element tracks have different sampling rates.

17. Thagard discloses (abstract) an, "...apparatus for recording and playing back multi-channel digital audio having different sampling rates for different channels.

18. The advantage of using different sampling rates, writes Thagard (column 1, lines 31-35) is that, "...increased sampling rates provide better audio reproduction. However, sampling all channels of multi-channel audio at very high rates may produce more data and take up more space on the software carrier than is necessary to produce better reproduction." Simply stated, not all audio channels require high sampling rates--such is the case of low frequency effects--i.e. bass, which can use a lower sampling rate, with little noticeable difference.

19. This is evidence that one of ordinary skill in the art would have reason/motivation/suggestion to use audio channels/tracks with different sampling rates for the purpose of conserving storage space on the storage medium on which the audio tracks are stored.

20. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hoke with the audio tracks having different sampling rates as described by Thagard for the purpose of conserving storage space on the storage medium on which the audio tracks are stored.

21. Furthermore, the method of performing the limitations described above merely discloses the steps needed for the gaming device's operation. Since each element must be implemented in order to make the device, the method would have been obvious in view of the device.

22. Claims 2 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoke in view of Koenig et al.; USPAT 6,729,618 (hereinafter Koenig).

23. As to claims 2 and 20, as discussed above, the Hoke invention discloses that it is capable of playing more than one musical sound recording at a time. Hoke however does not explicitly disclose that the sound recordings comprise one or more instruments not present in the other audio element tracks.

24. Koenig discloses (abstract), "A game that utilizes a plurality of sound lines (or sound tracks) which are components of a song where each sound line or ensemble may be reproduced either alone or together with any number of other sound lines." Koenig further discloses (column 7, lines 27-32), "...each sound lines consists essentially of musical sounds corresponding to an instrument or voice wherein the instrument or voice corresponding to the musical sounds of one sound line is substantially different from the instrument or voice corresponding to the musical sounds of each other sound line."

25. The advantage of having a music track with instruments not present in the other audio element tracks, Koenig writes (column 1, lines 27-32), is that, "The recording engineers may filter certain sounds or frequencies from a particular track without affecting other tracks, may modify the volume of each track relative to other tracks (i.e., balance the tracks), and may perform other modifications to the tracks in connection

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with the mixing or layering operation. Since the gaming device plays the role of the recording engineer, having tracks comprised of one or more instruments not present in other tracks gives the advantage of being able to modify a track without affecting the other tracks.

26. This is evidence that one of ordinary skill in that art would have reason/motivation/suggestion to use audio tracks having instruments not present in the other audio element tracks for the purpose of being able to modify a track without affecting the other tracks.

27. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hoke with the audio tracks containing instruments not present in other audio tracks as described by Koenig, for the purpose of modifying certain audio tracks without affection the other audio tracks.

28. Furthermore , the method of performing the limitations described above merely discloses the steps needed for the gaming device's operation. Since each element must be implemented in order to make the device, the method would have been obvious in view of the device.

29. **Claims 3-10, 14-15, 21-28, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoke in view of Koenig, and further in view of Kay, USPAT 6,087,578 (hereinafter Kay).**

30. As to claims 3-7, 14, 21-25, and 32, as discussed above, Hoke in view of Koenig discloses a gaming machine capable of playing multiple audio tracks, wherein the audio element tracks comprise one or more instruments not present in the other audio

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element tracks, however, Hoke in view of Koenig fails to explicitly disclose or suggest an audio element track comprising one or more instruments with multiple phrases independently selectable for playback to create a played audio track. Hoke in view of Koenig also fails to specifically disclose further limitations including: wherein multiple phrase are played back out of sequence to create the played audio track; wherein the phrase sequence comprises randomly selected phrase order; wherein the phrase sequence to be played back is provided by an ordered list of phrases; wherein the phrase sequence played back comprises a phrase sequence based on priority weighting; and wherein the audio elements phrases are sorted into at least two subgroups

31. Kay presents a method and apparatus for generating and controlling musical effects and discloses (abstract), "An initial note series is collected from a real-time source of musical input material such as a keyboard or a sequencer playing back musical data, or extracted from musical data stored in memory. The initial note series may be altered to create variations of the initial note series using various mathematical operations. The resulting altered note series, or other data stored in memory is read out according to one or more patterns (phrases). The patterns may have steps containing pools of independently selectable items from which random selections are made. A pseudo-random number generator is employed to perform the random selections during processing, where the random sequences thereby generated have the ability to be repeated at specific musical intervals. The resulting musical effect may additionally incorporate a repeated effect, or a repeated effect can be independently performed from

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input notes in the musical input material. The repeated notes are generated according to one or more patterns, which may also have steps containing pools of random selections. A duration control means is used to avoid polyphony problems and provide novel effects." Kay further discloses (column 13, line 46 - column 14, line 54), "A pattern in general is a sequential list of any length consisting of one or more steps. Each pattern may be of any length with relation to any other pattern. Each step consists of a data item or data location. The meaning of the data item or contents of the location is different for each type of pattern. For example, some patterns may represent musical characteristics such as pitch, duration, rhythm, and so on. Other patterns may represent indexes or pointers to memory locations utilized during processing, or indicate other functions of processing or processing instructions, such as a number of times to perform a certain procedure, and so on. Each pattern is accessed by a pattern index, indicating the next step of the pattern to be used during processing. Each pattern index can be moved independently of any other pattern index. In this example, each time a pattern is accessed, the pattern index moves to the next sequential step in the pattern, whereupon reaching the end the index is moved back to the first step. Other methods of movement such as backwards, forwards/backwards, random, or movement of the index according to an algorithm (e.g. every other or every third index, or forward by two, back by one and so on) may be employed (out of sequence). The various patterns can be part of a predetermined collection of parameters loaded as a whole by the user, or each type of pattern can be individually selected from pluralities of patterns of the same type stored elsewhere in memory. The data contained in each pattern step may be held in

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the predetermined pattern steps (ordered list), or may be independently selected and/or entered and changed in real-time by a user. Patterns in general may be broadly divided into two different categories (subgroups): specific value patterns and random pool patterns. A specific value pattern in general is a pattern consisting of one or more steps, with each step in the pattern consisting of one data item, or more than one data item to be used in conjunction with each other (set of data items). Because there is only one predetermined data item or set of data items, the specific values indicated by the data items are utilized as each step of the pattern is selected for use. A random pool pattern in general is a pattern consisting of one or more steps, with each step in the pattern constituting a pool of one or more data items, from which one or more selections will be made at random. Each step may contain a predetermined number of other locations into which data items may be stored, and a value indicating the number of total items currently stored in the location. Therefore, each step may be considered a pool containing a certain number of actual values indicated by the data items from which to make a random selection. This shall be referred to as the actual values pool method. Alternately, each step may contain a single value representing a pool of possible data items from which one will be chosen at random. For example, a single "n"-bit number can represent a pool of "n" different items, where the value of 1 for each bit represents the inclusion of the bit in a pool of choices (on-bits). When the step is selected for use, one of the on-bits can be selected at random, and mapped to a table of corresponding data items to use. This shall be referred to as the on-bits pool method. The data items represented by the steps of the pattern may form a subset of a larger set of available

data items. For example, a random pool pattern step may be capable of indicating up to sixteen data items, from a total available set of 128 different data items. During processing, a pseudo-random number is generated within a certain range using a seed value as a starting point. From this starting point the calculation of a string of apparently random numbers is performed. The starting point may be reset at any time, so that the same string of random numbers may be repeatedly generated. The random number is then modified by one of several weighting methods (priority weighting), which allow the selections to be influenced by favoring certain areas of the range. The resulting value is then scaled as necessary and used to select a data item or bit from the pool contained in the current step of the pattern, after which the resulting value can be used in the generation of musical data." This would meet the applicant's limitation of having an element track comprised of multiple phrases (patterns), wherein the phrases can be played back out of sequence; wherein the phrase sequence can be played back out of order; wherein the phrase sequence is played back according to an ordered list; wherein phrase sequence is selected based on priority weighting; and wherein the phrases are sorted into at least two subgroups.

32. Furthermore, the methods of performing the limitations described above merely disclose the steps needed for the gaming device's operation. Since each element must be implemented in order to make the device, the methods would have been obvious in view of the device.

33. The advantage of playing back the phrase sequences (patterns) using different means, Kay writes (column 14, lines 55-67) is that, "...a predetermined pattern that is

repeating can be caused to produce radically different results...in the case of rhythm, this could produce a rhythm pattern that can be changed from very simple and slow to something very fast and complex, even though the same pattern is being used. The data items and number of data items that the pools refer to can be changed in real-time, and the weighting methods varied in real-time, giving great control over the way random selections are generated."

34. This is evidence that one of ordinary skill in the art would have reason/motivation/suggestion to employ the method and apparatus for controlling musical effects, as described by Kay, specifically the different ways of generating patterns (phrases), for the purpose of creating radically different results and giving greater control over the way random selections are generated.

35. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Hoke in view of Koenig, with the different ways of generating patterns (phrases) as described by Kay for the purpose of creating radically different results and giving greater control over the way random selections are generated.

36. As to claims 8-10 and 26-28, while Hoke in view of Koenig and further in view of Kay does not specifically disclose the random combination of two or more audio tracks to create the played audio track, both Hoke and Koenig disclose the playing of two or more audio tracks at the same time, while Kay discloses (column 127, line 48 - column 128, line 4), "It is not necessary to use all of the patterns together discussed in these explanations, as they may each be used individually or in any combination. For

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example, the notes may be generated or repeated without the use of a velocity pattern to impart accents to them. The notes may be generated or repeated without the use of a spatial location pattern, so that no MIDI pan data is sent out. The notes may be generated or repeated without the use of a cluster pattern, and so on. The steps in the previous routines that handle the applicable operations of such patterns may be removed without affecting the processing of the invention. In its simplest form the process can use only a single pattern of any of the patterns shown and achieve greater diversity over existing methods. Alternately, it is possible to combine one or more of the various elements of the individual patterns into a composite pattern, so that each step for example contains data for the rhythm, data for the transposition, data for the velocity, and so on." Thus, Kay suggests the combination of patterns, having previously discussed the ability to randomly play patterns, play patterns according to predetermined parameters (list), and play patterns based on priority weighting. It would have been a matter of choice well within the capabilities of one skilled in the art to combine audio tracks randomly, according to a predetermined list, or based on priority weighting, as this is a simple substitution (i.e. pattern for audio track) of one known element for another.

37. Furthermore, the methods of performing the limitations described above merely disclose the steps needed for the gaming device's operation. Since each element must be implemented in order to make the device, the methods would have been obvious in view of the device.

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38. As to claims 15 and 33, as discussed above, the patterns can be classified into two subgroups, that is to say the 'actual value group' on the on-bits pool group. Kay discusses compatibility using the on-bits pool group (column 33, lines 43 - 62), "In another embodiment, two or more of these patterns are played simultaneously, with separate weighting methods, and with the "n" bits of the pool representing different drum sounds in each pattern. FIG. 23 shows three example patterns that are being used simultaneously. In this example, each pattern uses only 4 bits. Pattern 1 represents drum sounds of a kick, snare, low tom and null value 2300. Pattern 2 represents cymbal sounds of a hi-hat, crash, splash, and null value 2302. Pattern 3 represents percussion sounds of a tambourine, cowbell, shaker, and block 2304. The patterns can be of different lengths and will loop concurrently, so for example, the dotted outlines of Pattern 2 indicated that it will have played 4 times during one repetition of Pattern 1. Although this example shows the three patterns having a length with a common multiple of 4, this is not necessary and they can be of any length. Furthermore, the steps in each pattern can be selected by the same rhythm pattern or selection means, so that they are synchronized, or by different rhythm patterns and selection means, so that they may be utilized at different speeds or rhythms." This would meet the applicant's limitation, wherein the audio elements in the phrase (pattern) subgroups are grouped by compatibility with other audio element subgroups.

39. Furthermore, the method of performing the limitation described above merely discloses the steps needed for the gaming device's operation. Since each element

must be implemented in order to make the device, the method would have been obvious in view of the device.

Response to Arguments

40. Applicant's arguments with respect to claims 1-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

41. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

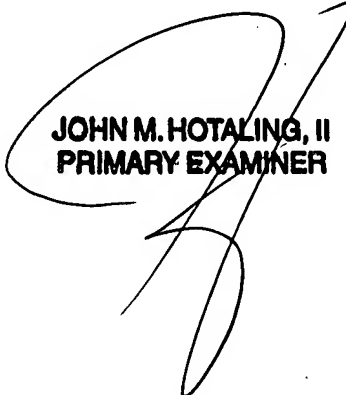
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher H. Bond whose telephone number is (571) 272-9760. The examiner can normally be reached on M-F 9:30am - 6pm (Eastern Standard Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chris Bond


JOHN M. HOTALING, II
PRIMARY EXAMINER